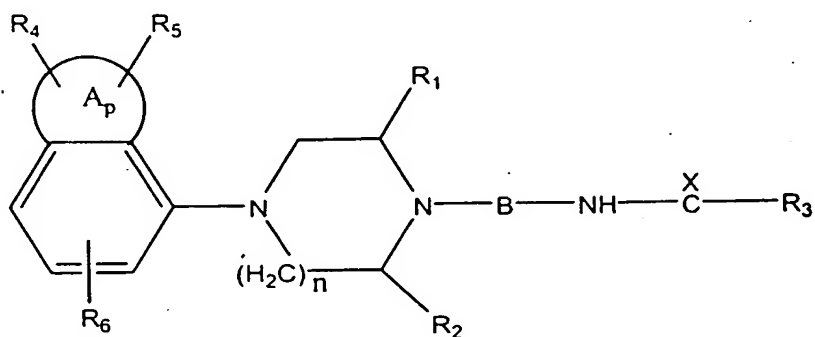


WE CLAIM:

1. A method of treating Attention-Deficit/Hyperactivity Disorder ("ADHD") in humans by administering a pharmaceutical formulation containing a therapeutically effective amount of a compound or compounds having full agonist or partial agonist activity at 5-HT_{1A} receptors, wherein any non-5-HT_{1A} agonist that is included in said formulation as an active ingredient, no such active ingredient is nicotine or a nicotinic agonist with the proviso that said formulation does not comprise nicotine or a nicotine agonist or buspirone or sunipetron.
2. A method according to claim 1 wherein 5-HT_{1A} agonist is a compound according to the formula I:



wherein

- R₁ and R₂ independently of each other represent hydrogen or an alkyl having 1-3 carbon atoms;
- R₃ is an aryl group or heteroaryl group which may be substituted with one or more substituents selected from the group consisting of halogen, trifluoromethyl, nitrile, nitro, alkoxy, having 1-3 carbon atoms, hydroxy, esterified hydroxy, and alkyl having 1 or 2 carbon atoms;
- X is O, S, or NH;
- B is the group -CH₂-CH₂- or -CH(CH₃)-CH₂-;

- n has the value 0 or 1;
- p has the value 0 or 1;
- where p has the value 1,

A is O-CH₃, or forms, with the two carbon atoms of the phenyl group, an optionally substituted, entirely or partly unsaturated, cyclic group having 5-7 atoms in the ring, which comprises 1-3 hetero atoms from the group O, S, and N, with the proviso that the sum of the number of oxygen and sulfur atoms is at most two, --- and where A is not O-CH₃.

R₄ is hydrogen or straight or branched chain alkyl having 1-3 carbon atoms and R₅ is hydrogen, halogen, alkyl having 1-3 carbon atoms, methylene, ethyldiene or vinyl, a straight or branched hydroxyalkyl group having 1-3 carbon atoms, which may be etherified or esterified, or an alkyl branched hydroxyalkyl group having 1-3 carbon atoms in the straight or branched alkyl group, an oxo group or a phenyl group; and

- R₆ is a hydrogen or fluoro atom;

wherein

- the compound may be a racemate or a single diastereomer or enantiomer;
- or a pharmaceutically acceptable acid addition salt thereof.

3. The method of claim 2,

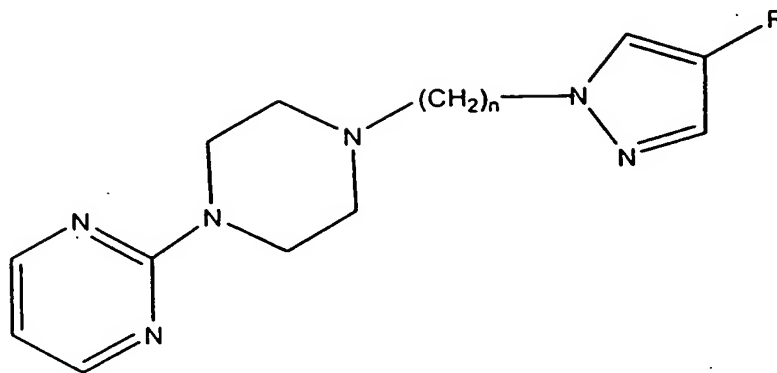
wherein

- R₁, R₂, and R₆ are hydrogen;
- R₃ is a lipophilic aromatic alkyl, selected from the group consisting of benzene, halogenated benzene, cyclohexane, and 2-thiophene;
- X is O, S, or NH;
- B is the group -CH₂-CH₂-
- n has the value 1; and
- p has the value 0 or 1,
- and where p has the value 1.

A is O-CH₃, or forms, with the two carbon atoms of the phenyl group, an optionally substituted benzodioxane, a hydroxyalkyl having 1-2 carbon atoms, or a furan, R₃,
--- and where A is not O-CH₃,
R₄ is hydrogen, and
R₅ is hydrogen, or chiral -CH₂OH- at the 2 position of the benzodioxane ring.

4. The method according to claim 3, wherein the compound is flesinoxan, wherein
 - R₁, R₂, and R₆ are hydrogen;
 - R₃, is halogenated benzene group, having a fluoro in the para position;
 - X is O;
 - B is the group -CH₂-CH₂-;
 - n has the value 1;
 - p has the value 1;
 - A is benzodioxane;
 - R₄ is hydrogen
 - R₅ is chiral -CH₂OH- at the 2 position of the benzodioxane ring; and
 - the salt is hydrochloride.
5. The method according to claim 4, wherein the compound is administered at a dose of approximately 0.04 mg/day to 4 mg/day.
6. The method according to claim 5, wherein the compound is administered at a dose of approximately 0.1 mg/day and 1 mg/day.
7. The method according to claim 6, wherein the compound is administered at a dose of approximately 0.1 mg/day and 0.5 mg/day.

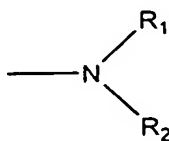
8. The method according to claim 1, wherein the 5-HT_{1A} agonist is a compound having the formula II:



II

wherein

- n can have the value 1 to 6;
- R is a hydrogen, a halogen, a lower alkyl radical having 1-4 carbon atoms, a heteroaryl radical, a sulpho radical, an N-substituted or N,N-disubstituted sulphamoyl radical, a nitro radical, a hydroxyl radical, an oxo radical, a lower alkoxyradical having 1-4 carbon atoms, a cyano radical, a lower alkylcarboxylate radical having 1-4 carbon atoms, an aryl or substituted aryl radical, or an amino or substituted amino radical of formula



in which R₁ and R₂, independently are a hydrogen, an alkyl radical, an aryl radical, an alkylcarbonyl radical, an arylcarbonyl radical, an alkylsulphonyl radical or an arylsulphonyl radical, the alkyl fragments of these radicals containing from 1-4 carbon atoms; and

wherein

- the compound may be a racemate or a single diastereomer or enantiomer;

-or a pharmaceutically acceptable acid addition salt thereof.

9. The method according to claim 8, wherein the compound is lesopitron, wherein
 - n is 4,
 - R is chloro; and
 - the salt is dihydrochloride.
10. The method according to claim 1, wherein the 5-HT_{1A} agonist is selected from the group consisting of flesinoxan, lesopitron, BAY x 3702, F11440, LY228729, LY293284, NAE-086, S14506, S14671, S16924, or gepirone.
11. The method according to claim 1, wherein the 5-HT_{1A} agonist(s) is the sole ADHD active component(s) of the formulation.
12. The method according to claim 10, wherein the 5-HT_{1A} agonist is administered at a dose of approximately 0.01 mg/day to 100 mg/day.
13. The method according to claim 10, wherein the 5-HT_{1A} agonist is administered at a dose of approximately 0.1 mg/day and 10 mg/day.
14. The method according to claim 10, wherein the 5-HT_{1A} agonist is administered at a dose of approximately 0.1 mg/day and 2 mg/day.
15. The method according to claim 1, wherein the intrinsic activity of the 5-HT_{1A} agonist is at least 0.5-1.0.
16. The method according to claim 15, wherein the intrinsic activity of the 5-HT_{1A} agonist is at least about 0.6-1.0.
17. The method according to claim 16, wherein the intrinsic activity of the 5-HT_{1A} agonist is at least about 0.7-1.0.
18. The method according to claim 17, wherein the intrinsic activity of the 5-HT_{1A} agonist is at least about 0.8-1.0.

19. The method according to claim 2, wherein the difference in affinity of the 5-HT_{1A} agonist for 5-HT_{1A} receptors compared to any of 5-HT_{1B/1D}, 5-HT₂, D₂, D₄, α_1 or α_2 receptors or SERT, DAT, or NET (ΔpK_i) is at least 1.
20. The method according to claim 2, wherein the difference in affinity of the 5-HT_{1A} agonist for 5-HT_{1A} compared to D₂ receptors (ΔpK_i) is at least about 2.
21. The method according to claim 2, wherein the difference in affinity of the 5-HT_{1A} agonist for 5-HT_{1A} receptors compared to any of 5-HT_{1B/1D}, 5-HT₂, D₂, D₄, α_1 or α_2 receptors or SERT, DAT, or NET (ΔpK_i) is at least about 2.